

Amendments to the Claims

Claims 1-48 (Cancelled)

49. (Currently amended) A method of forming silicon-on-insulator comprising integrated circuitry, comprising:

forming a ~~silicon-comprising~~ silicon-comprising layer of the silicon-on-insulator circuitry;

~~forming a pair of source/drain regions in the silicon-comprising layer and a channel region in the silicon-comprising layer which is received intermediate the source/drain regions;~~

~~forming a transistor gate operably proximate the channel region;~~

forming an insulator layer of the silicon-on-insulator circuitry, the insulator layer being formed to comprise:

a first silicon dioxide-comprising ~~dioxide-comprising~~ region in contact with the ~~silicon-comprising~~ silicon-comprising layer and running along at least a portion of the ~~channel region between the source/drain regions;~~

a silicon nitride-comprising ~~nitride-comprising~~ region in contact with the first silicon dioxide-comprising ~~dioxide-comprising~~ region and running along at least a ~~portion of the channel region; and~~

a second silicon dioxide-comprising ~~dioxide-comprising~~ region in contact with the silicon ~~nitride-comprising~~ nitride-comprising region, the silicon nitride-comprising ~~nitride-comprising~~ region being received intermediate the first and second silicon dioxide-

comprising ~~dioxide-comprising~~ regions, the forming the insulator layer comprising forming a first silicon dioxide layer on a first substrate, forming a second silicon dioxide layer on a second substrate and joining the first substrate to the second ~~substrate~~. substrate;

forming a pair of source/drain regions in the silicon-comprising layer, each of the source/drain regions extending to the insulator layer;

forming a channel region in the silicon-comprising layer which is received intermediate the source/drain regions, the channel region extending less than completely through a thickness of the silicon-comprising layer, the silicon-nitride-comprising region running along at least a portion of the channel region and the first silicon dioxide layer running along at least a portion of the channel region; and

forming a transistor gate operably proximate the channel region.

50. (Withdrawn) The method of claim 49 comprising forming the silicon ~~nitride~~ comprising nitride-comprising region comprising nitridizing at least one of the first and second substrates prior to the joining.

51. (Withdrawn) The method of claim 50 wherein the nitridizing comprises ion implanting.

52. (Withdrawn) The method of claim 50 wherein the nitridizing comprises direct plasma nitridation.

53. (Withdrawn) The method of claim 50 wherein the nitridizing comprises

remote plasma nitridation.

54. (Withdrawn) The method of claim 50 wherein the nitridation is void of either direct or remote nitrogen containing plasma exposure.

55. (Currently amended) The method of claim 49 comprising, forming the silicon nitride-comprising ~~nitride-comprising~~ region comprising nitridizing after the joining.

56. (Original) The method of claim 55 wherein the nitridizing comprises ion implanting.

57. (Withdrawn) The method of claim 55 wherein the nitridizing comprises direct plasma nitridation.

58. (Withdrawn) The method of claim 55 wherein the nitridizing comprises remote plasma nitridation.

59. (Withdrawn) The method of claim 55 wherein the nitridation is void of either direct or remote nitrogen containing plasma exposure.

60. (Currently amended) The method of claim 55 comprising forming the silicon nitride-comprising ~~nitride-comprising~~ region to have a thickness of from about 10 Angstroms to about 50 Angstroms.

61. (Currently amended) The method of claim 55 comprising forming the first silicon ~~dioxide-comprising~~ ~~dioxide-comprising~~ region to have a thickness of from about 10 Angstroms to about 50 Angstroms.

62. (New) A method of forming silicon-on-insulator comprising integrated circuitry, comprising:

forming a silicon-comprising layer;

forming an insulator layer, the insulator layer being formed to comprising:

a first silicon dioxide comprising region in contact with the silicon-comprising layer;

a silicon nitride comprising region in contact with the first silicon dioxide; and

a second silicon dioxide comprising region in contact with the silicon nitride comprising region, the silicon nitride-comprising region being received intermediate the first and second silicon dioxide comprising regions;

forming a pair of source/drain regions in the silicon-comprising layer, each of the source/drain regions extending to the insulator layer;

forming a channel region in the silicon-comprising layer which is received intermediate the source/drain regions, the channel region extending less than completely through a thickness of the silicon-comprising layer; and

forming a gate structure operably proximate the channel region.

63. (New) The method of claim 62 wherein the forming the insulator layer further comprises:

forming a silicon oxide material over a first substrate;

forming a second silicon oxide material over a second substrate; and

joining the first and second substrates to form a joined substrate.

64. (New) The method of claim 63 wherein the joining comprises applying a voltage to the first substrate and the second substrate.

65. (New) The method of claim 63 further comprising, after joining the first and second substrates, thinning the joined substrate.

66. (New) The method of claim 65 wherein the thinning comprises removal of a portion of the silicon-comprising layer.